

A few years ago the Junkers *Bremen*, with its full load for the flight to America, took off from the concrete runway at Dessau, Germany, with a run of only 1,800 feet. The same machine, with decreased load, required a starting run of 4,750 feet on its next take-off from the rolled cinder runway at Baldonell, Ireland.

Much has been written about runways; on the Continent to some extent, and in America to a greater extent, the conclusions arrived at have been put into practice. At the time of writing, out of 333 classified aerodromes in the U.S.A., 244 have runways; and concrete runways, which, with their low resistance to traction, enable aeroplanes to acquire flying speed with a shorter run than from any other surface, have come to be regarded as a necessity at up-to-date airports.

It has been argued that a concrete surface, though ideal for taking off, is too hard for comfortable landings. A moment's reflection will show that no pavement which is firm enough to carry aeroplane loads can be soft and pliable enough to cushion the blow of a landing machine. A so-called "resilient" surface could hardly permit the wheels to sink into it more

than a fraction of an inch, and this would be insignificant compared with the "take-up" of 12 in. or more provided by the tyres and shock absorbers of the machine. Leading American pilots, who, it must be remembered, have had a wide experience of concrete runways (whereas our pilots, as a class, have not), endorse the concrete runway as superior for landing on as well as for taking-off from.

Another bogey that has been killed is the theory that a concrete surface would be injured by tail skids. Apart from the fact that the development of wheel brakes, now universal on all but the smallest aeroplanes, has removed the need for the tail skid to be used as a brake and has led to its replacement by a tail wheel, actual tests have shown that the concrete was unaffected and that the only result was more rapid wear of the tail skid.

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#### IN BRIEF

A young Danish reader is anxious to correspond with English enthusiasts on aviation matters. He is Mr. Henry Larsen, c/o H. Jessen, Greve Strand, Sjælland, Denmark.

## MAXWELL HUTCHEON FINDLAY

**CAPT. MAX FINDLAY, D.S.C.; D.F.C., R.A.F.O.** (whose death in a Johannesburg Race accident is recorded elsewhere), will be sadly missed at Brooklands, where he was an instructor and sales manager. Of Scottish birth, he was thirty-eight years of age and had twenty years of flying experience behind him. His war service began in the Black Watch, from which he transferred to the R.A.F. After the War he served in India with the R.A.F., and was in the Afghanistan and Waziristan campaigns of 1919-21.

He did not continue his flying immediately after the War but, instead, turned his interest to farming in Scotland, gaining first-class diplomas in agriculture at Aberdeen University. The call of the air proved too strong, however, and in 1930 he joined National Flying Services, Ltd., to which he was chief instructor until 1933. From there he went to Brooklands.

Capt. Duncan Davis, managing director of Brooklands Aviation, Ltd., tells us that, although Findlay was a very senior and experienced pilot when he joined their staff, he worked for twelve months quite happily under the then Chief Instructor, Lowdell.



"Max" says Capt. Davis, "was without exception the hardest working executive on our staff, and on very many occasions he has done anything up to eight or nine hours' flying in a single day. He was equally efficient on instruction, taxi work and the selling of aircraft, and one of my only troubles was to get him to take a day off duty."

"He has always been passionately fond of animals, and early last year started to breed and race greyhounds. This hobby was, in my opinion, his salvation, as it would take his mind off aviation for at least one day in seven. He had a keen sense of humour and a most fertile brain, and as a personality he was one of the most likeable people I have ever met. His loss to Brooklands, and to British aviation, is irreparable."

Mr. Griffith Brewer, the veteran private owner, pays the following tribute in a letter to *The Times*:—

"It is difficult for instructors but half the age of their pupils to temper instruction with kindness while being firm. Max was modest but never weak, and when he corrected us we remembered it, but without resentment. Some time ago, after I had been looping at Hanworth, he greeted me as I taxied up to the hangar. In commenting on the flight I confessed to him that I found when I came to undo my belt I had neglected to fasten it. His remark was mild but effective when he said that in all his flying he had never flown with his belt unfastened. This care in his flying accounted for his fearless-

ness, for by eliminating all risks he left no risks to run. Max was the finest pilot I have ever known. When I wanted to store my machine for the winter in a hangar in a small field surrounded by high trees at my home it was Max Findlay who undertook the landing. Several pilots assembled and saw him drop the aeroplane and land it within half the small space available. The following spring he flew it out again."

#### A. H. Morgan

Mr. A. H. Morgan, the radio operator who was killed with Capt. Findlay, had left the sea in order to take up aircraft wireless operating. For some time he had been with Air Dispatch, Ltd., working on their early-morning newspaper and other services.

A memorial Service for the two men will be held at St. Columba's (Church of Scotland), Pont Street, London, S.W.1, at noon next Monday.

## Miss Batten's Latest Venture

**FLYING** a Percival Gull, Miss Jean Batten left Lympne at 4.10 a.m. last Monday in an attempt to cut down her previous time between England and Australia by, in her own words, "at least a week." In 1934, flying a Moth, she made the journey in 14 days 23 hours.

She may continue the flight through to her home in New Zealand.

The machine is fitted with extra tanks in the cabin. Miss Batten did not fill them to capacity before leaving, and refuelled at Marseilles. She arrived at Brindisi on Monday afternoon, and left for Cyprus on Tuesday morning.

She reached there speedily, stayed for a short time, and left at 11.45 a.m. (G.M.T.) for Baghdad.

It was announced last week that, in recognition of her South Atlantic flight, Miss Batten had been awarded the 1935-36 Johnston Memorial Prize by the G.A.P.A.N. The Prize, which is awarded annually for the best feat of navigation, was founded in memory of the late Sqn. Ldr. E. L. Johnston, navigator of the R101, who died in the disaster to the airship. The prize is a silver plaque showing Mercator's projection of the world, surmounted by an engraving of Sqn. Ldr. Johnston.

## The Dumfries Project

**IT** has been officially announced in Dumfries that the Arrol-Johnston works at Heathhall have been acquired by a new company named High Power Aeronautical Engines, Ltd. Production is to be started as soon as possible of a well-known world-famous aero engine, and also of marine engines for high-speed coastal motor boats. This statement was made to a correspondent by Mr. J. R. Greenwood Bramhall, in whose name the factory was purchased last spring. He said: "We will be ready to start production as soon as the machinery is installed. We have no Government contracts and we cannot expect any until we are in a position to give delivery, but as soon as we are I have no doubt we will get Air Ministry and Admiralty contracts."

He thought the factory would ultimately employ 2,000 persons. Mr. James Pratt, formerly with Armstrong-Saurer and Armstrong Whitworth, Ltd., has been appointed works manager.